# USING FACEBOOK FOR EDUCATIONAL RESEARCH: CHOICE, TRIALS, REFLECTION AND INSIGHT

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## **Abstract**

Facebook status updates provided the data for a study into the transition learning experiences of first year university students. The research responded to criticism that research about social media and education tends to focus on how social network sites can be adapted or controlled in the educational setting. The research referred to here, used Facebook only to observe and archive the described experiences of the first year university student participants. This paper explains why Facebook was chosen as a data collection tool, describes the trial and error associated with recruiting participants, and reflects on the lessons learned from the process. Social network sites (SNSs) can provide a unique the insight into student educational experiences. Research which trials its use is an important contribution to academic discussion about their use in educational research.

#### Introduction

Higher education in the twenty-first century is facing a tumultuous time. Not only are governments demanding structural change but the very nature of learning is evolving. Universities are under pressure to graduate highly skilled workers to cope with the demands of an increasingly technological society. That very technology is changing how degree requirements are fulfilled. Tertiary education is associated with social and economic equality (OECD, 2011) and a tertiary qualification is imperative for keeping up with the technological demands of an increasingly globalised economy (Bradley, 2008). In other words, tertiary qualifications amount to a successful employment outcome. According to McInnis (2001), the first year university has been identified as being the year in which the highest percentage of students fail and/or withdraw from their courses, and it is the view of key FYHE researchers that successfully finishing first year is a highly significant contributor to the completion of a tertiary qualification (Harvey, Drew, & Smith, 2006; Kift, Nelson, & Clarke, 2010; Krause, Hartley, James, & McInnis, 2005; Tinto, 2006-7).

Issues of retention have been central to FYHE research since the 1950s (McInnis, 2001). During the 1970s and 1980s concerns about first year student withdrawal prompted Tinto (1990) to develop a model of student retention. Within the Australian context the experiences of first year students have been the focus of a large scale, government funded, longitudinal study, begun in the early 1990s (James R., Krause, & Jennings, 2010). This longitudinal study has been integral to higher education government policy shifts during the first decade of the twenty-first century (Bradley, 2008). The Review of Australian Higher Education Report (Bradley Report) firmly placed the funding of undergraduate education in the hands of students with the recommendation that federal monies be attached to the student. The cost of attrition for each of the 38 public universities in Australia amounts to around \$20-\$36 million per annum (Adams, Banks, Davis, & Dickson, 2010). It has become in the best interest of universities to retain their students. Implementation of a successful first year transition curriculum is an institutional necessity because students are more likely to withdraw from higher education during their first year than any subsequent years (James, R. et al., 2010).

The past five decades of research has been highly valuable in the reimagining of universities in the twenty-first century; however, the key ideas in this research have been built upon ideas that were developed in a different communicative, technological and social context. In the increasingly competitive university education industry, it has never been more important to have a holistic understanding of what it is like to be a contemporary university student.

The research reported on in this paper sought to centralise student voices to develop an understanding

of what it means to be a twenty-first century university student by using the social network site (SNS), Facebook, to collect data. By using Facebook as a research tool in its appropriate sociological and historical context, I endeavoured to contribute to higher education programming by concentrating on the pedagogical imperative, knowing the students.

This paper first reviews literature that has used Facebook as a part of research method, including a brief outline of the study that is the focus of this paper. Second, it explains why Facebook was chosen as the data collection tool. Third, this paper describes the research journey, trials and errors associated with recruiting participants. Fourth, it concludes by reflecting on the lessons learned from the process and the unique insights that can be gained by embracing SNSs as tools for research.

### Literature

It would be irresponsible to conduct research into contemporary university students' experiences without considering the impact and use of SNSs on global communication. The advent of SNSs has provided ample opportunity for understanding university students. In recent years the increased use and accessibility of SNSs has opened doors to a multitude of experiential descriptions. Research interest in using SNS data has been increasing since the turn of the twenty-first century with more and more social researchers seeing the value of online data (Lazer et al., 2009). For example, Selwyn (2009) used Facebook status updates to discover that undergraduate students were using Facebook to record their experiences of university. Selwyn also reported that undergraduate students were using Facebook for ad-hoc learning experiences and for connecting with their classmates. The role of SNSs in enhancing social integration and learning experiences is extensive (Hew, 2011). The majority of the higher education research about Facebook (for example see Lampe, Wohn, Vitak, Ellison, & Wash, 2011; Madge, Meek, Wellens, & Hooley, 2009) has been oriented towards discovering how undergraduate students are using Facebook.

Selwyn (2012) notes that the bulk of research that references SNSs is one dimensional and determinist. He explains that the research is primarily concerned with what should or could happen with SNSs in an educational setting. This concentration has led to a uniform view on how technology is used in education, usually centring on how digital technologies can enhance learning with little regard for the historical and sociological contexts within which education and technology exist.

Research that uses Facebook as a tool to collect data from undergraduates and uses that data for content analysis of the university experience is small but it is emerging. Baker (2013) discovered the usefulness of SNSs for conducting a longitudinal study. She used content analysis of Facebook status updates as a component of a study into the reading and writing practices of 11 students moving from secondary school study to undergraduate study. Baker used Facebook initially to communicate with her participants as they moved from their common secondary school to multiple geospatial and temporal boundaries as they attended different universities. As her study progressed, Baker began used a content analysis of status updates made by her participants to enhance her inquiry. While Cheung, Chiu, and Lee (2011) did not analyse status update content on Facebook, they utilised the SNS for access and for the recruitment of participants to their study exploring what drives university students to use SNSs. Selwyn (2009), Jenkins, Lyons, Bridgstock, and Carr (2012) and Bosch (2009) all found that undergraduates are describing their university experience on Facebook, but only Selwyn (2012), in a later paper, extrapolated on the data to the question of how Facebook data can be used to describe participants' perceptions of university. Through reviewing the literature about the theoretical direction of research into SNSs, Selwyn suggests that there is a gap in the research where SNSs are allowed to be simply SNSs. In other words, higher education research has usually looked for a way to use SNSs to enhance university experiences rather that exploring what is being shared about the experience on SNSs.

The study that provides the basis for this paper (Barnes, 2014), used Facebook status update data to centralise student voices in the field of transition pedagogy and curriculum. Firstly, through analysing

Facebook status updates, the experiences of students during four critical times of the first year of university were examined to gain insight into what the student participants were focusing on. Secondly, the variation of experience was explored in order to determine a set of themes that could frame a transition curriculum. Finally, the participants' transition into the university lifestyle was considered, so that suggestions could be made about when transition success could be monitored and evaluated. The study found that the students' experiences of first year university are diverse. While this finding is well established in participating FYHE research, the study is different in that the data highlights the diversity of experience for individuals, not just groups. The study also found that students are heavily using SNSs to navigate their way through their first year of university by building online informal learning communities. The students are opening for discussion important transitional problems as well as course content, often live from within their lectures and tutorials. The family, friends, past students, and peers that are interacting with the students on Facebook are providing feedback, advice and moral support.

The following section explains why Facebook was selected as the only data collection tool for the above study.

## **Choosing Facebook**

The decision to use Facebook as the only means of data gathering was reflexive. As a PhD student and a fringe dweller to the academic world (Roesch-Marsh, Gadda, & Smith, 2012) and without direct access to a class of first year students, gaining face-to-face access to a group of students was problematic. It is important to create a safe space in which to conduct an interview, especially on a voluntary basis outside the classroom structure (Nairn, Munro, & Smith, 2005; Reinharz, 1994). First year students are often anxious and overwhelmed at the beginning of their transition to university (Friedlander, Reid, Shupak, & Cribbie, 2007); therefore, a student volunteering for a research project during the official orientation week activities was highly unlikely. Using Facebook as a means of collecting data circumnavigated this concern.

Facebook was also chosen as a data collection tool because the application is an integral and vital part of contemporary young people's lives. According to Alexa (2011), a provider of free global web metrics, Facebook in 2011, the year data was collected for this study, was statistically the most used social media site. In 2011 Facebook was second only to Google, as the most highly trafficked internet site accessed by more than 44 percent of global internet users. Almost 10.5 million Australians used Facebook in 2011; the largest age demographic was registered as 18-34 year olds at 24.8% (Gonzalez, 2011). Relative to the general internet population, Facebook is also more likely to be used by people who went to college or to graduate school (Alexa, 2011; Gonzalez, 2011). In the light of these freely accessible statistics, Facebook was the clear choice of data collection instrument to be used for this study.

The principal purpose of Facebook is to record personal activities using the status update function. A status update is a short, written online diary entry that is structured like an online forum where a user's Facebook network (or Friends) can choose to comment on the status update. The status updates are organised on Facebook as part of a personal timeline. Facebook is essentially a public, interactive, and instant personal diary. It was these descriptions that I wished to access because previous research highlighted the interconnection between Facebook usage and experiences at university.

Selwyn (2009) sought to discover what 909 undergraduate students at a single university were saying on Facebook over the first six weeks of the academic year. By using Facebook status data, Selwyn aimed to discover how the students were using Facebook, what aspects of university were being described, as well as answering questions about the correlation between disengagement with study and Facebook usage. Selwyn found that students were using the SNS to critique their learning experiences (a display of metacognitive awareness), exchange information about their studies, and promote their academic success or failure. Jenkins et al. (2012) reported on the creation of a faculty Facebook page.

They found that the students were using the page to help each other with academic questions, and that there was a strong correlation between use of the faculty Facebook page and key academic dates such as assessment. Through Facebook the faculty co-ordinators had a "backstage" view of students' experiences of university. Bosch (2009) reported on such a backstage view of university related engagement on Facebook. She reviewed the content of 150 university students' Facebook profiles (not controlled by privacy settings) to gauge academic involvement with the site. Bosch found that the students' Facebook Friends were helping them with academic questions and that those actively engaged in university related Facebook groups were welcoming of the idea of using Facebook for academic purposes. While the above studies suggest that students use Facebook for informal and independent learning (that is they are using their own initiative to find information), these studies do not consider whether the students are engaged in reflection about their experiences of learning.

Stephenson-Abetz and Holman (2012) conducted a study into the transition experiences of first and second year university students and their experiences with old and new connections. Stephenson-Abetz and Holman found that Facebook provided a link to old connections, helping to preserve memories of their pre-university life, easing homesickness and feelings of isolation. Additionally, they found that Facebook provided a space for the students to re-invent themselves if they so desired. Furthermore, the researchers found that students overwhelmingly loved how easy it was to communicate with and befriend people at university using Facebook. The SNS allowed the students to connect with people on campus before starting first year, to get a sense of life at university, to chat with classmates about academic requirements, and to stay connected with high school friends and family members, often on a daily basis.

Gray, Vitak, Easton, and Ellison (2013) targeted first year students when researching the role Facebook had in the students' social adjustment during their first year of college. Working on the well-established premise that social adjustment plays a large role in the successful transition to first year college, Gray et al. created a survey based model that consisted of both traditional and Facebook-specific predictors of social support and adjustment. They then used this model to predict second year enrolment status. Gray et al. found that students who had a high number of Facebook friends and who engaged in university related discussions on Facebook were more likely to adjust successfully to university and continue their study.

There is a large body of research into the social implications of SNSs and the experiences of the FYHE but none of the above literature considers the student experiences that they describe on Facebook. This research project that provides the basis for this paper, aimed to fill that gap. The following section describes how Facebook was used to collect data.

# **Using Facebook**

This study reported on in this paper accessed the data by initiating a networked connection with 17-19 year old first year university students through a Facebook profile created for the study. Descriptions of the first year experience were collected by archiving Facebook electronic instant messages (status updates) from the Facebook accounts of the participants. Facebook status updates were the digital artefacts which were made available to me by the participants.

The participants were school leavers who were entering their first year of university in 2011and who have an active Facebook account. The 31 participants all attended one of three multi-campus universities in Southeast Queensland and were enrolled in a diversity of courses including education, creative industries, marketing, and engineering. This study initially recruited thirty-one (31) first year students. Twelve of the students were identified as being first year students by using the school identification feature on Facebook. They were also identified as being 17-19 years old from their nominated age on Facebook. The twelve participants were subsequently approached and recruited via Facebook's Friend request tool –Students were sent a request to add the researcher as a Friend to allow access to their general posts. Eighteen participants were recruited through emails to first year

university students via their first year liaison supervisors, or through secondary school alumni contacts. These emails also asked participants to help recruit further participants.

A Facebook profile named FYHE Profile was created to be my online presence for the duration of the study. The FYHE Profile enabled recruitment and interaction with the participants through either the status update or the direct messaging tool. These tools allowed either public (status update) or private (direct messaging) communication between the participants and the researcher. On the profile, informed consent materials were recorded, directing each participant to read the information. They agreed to participate by adding the FYHE Profile to their Facebook network. The participants were also reminded via status updates and direct messaging to consider the information about the research published on the FYHE Profile page. By agreeing to connect with the FYHE Profile, each participant became part of the researcher's Facebook network. The profile had a newsfeed that showed the public status updates and other Facebook activities in which the FYHE Profile network was engaged. It was via this newsfeed that status updates were collected.

Data was collected through manual data crawling (Wilson, Gosling, & Graham, 2012). The 31 participants made their status updates (status data) and any further comments they made on those status updates (commentary data) available for collection, provided the content related to university. The study-specific Facebook profile, allowed the researcher to collect conversations about university experiences 24 hours, seven days per week. Both status updates and any further commentary the participants made within the thread initiated by the status update was collected. While, commentary was not collected from the participants' Facebook network, enough information was extracted to enhance the participants' meaning. The transcription of data is the status and commentary data of the participants.

The selection of status updates was limited to content about university. Participants were recruited with the understanding that only status updates that were related to university experiences would be archived. Data collection also only occurred during specific phases during the university year. The times are based on those nominated by the first year student participants in Penn-Edwards' and Donnison's (2011) study: in the first weeks of orientation, after the first assignment is returned, end of the first semester and end of the first year. There were three advantages in monitoring the participants' Facebook status updates during these four times. The first advantage was the logistical ease of recruiting participants for the study while they were in attendance at university. The second advantage was the removal of the need to monitor the students constantly for ten months and thereby creating the four distinct snap shots in time that were analysed. The third advantage was that these phases were when first year students were expected to be emotive about their university experience (Penn-Edwards & Donnison, 2011).

The next section reflects on the use of Facebook as a data collection tool and makes recommendations for future research and consideration.

## **Reflection and Conclusions**

Facebook status updates provided insight into the informal learning world of the participants in this study. It is acknowledged that the data, as with all data, only provides insight, not a holistic understanding of the online or offline world of the participants. It should also be acknowledged that there is a blurring between these two existences in the modern world. The data has shown that time and place no longer inhibit updating a personal network of activities and opinion, nor does it limit discussion. The advantages of using Facebook as a data collection tool are detailed below.

First and foremost it is important to note that the participants in this study were in fact recording experiences of their first year at university. As also noted by Selwyn (2009) these experiences include post-hoc descriptions of learning experiences, the exchange of information, moral support, and descriptions of their level of academic engagement. For example, M03 reflected on how his exam

would affect his grade point average; F11 studied exam concepts with her network; F02 complimented a fellow student on his/her presentation; and F09 reflected on whether or not lectures were worth attending. Further to these findings, the status updates also showed holistic reflection on university experiences as compared to high school. For example, F07 reflected on how she did not miss school and felt like she fitted in at university.

Facebook as a data collection tool was also valuable for conducting a longitudinal study. I was able to keep in touch with the same participants during all four critical times. Only one participant (F07) withdrew from the study and that was because she cancelled her Facebook account, not because she was opposed to continuing the study. McInnis (2001) calls for more longitudinal studies into the experience of the FYHE, including following a group of students to the completion of their degree. SNSs like Facebook would be of great assistance for keeping in touch with participants over three to four years or longer. Furthermore, as both Baker (2013) and the research referenced here found, Facebook makes continued contact possible across campuses. Therefore, if a student elects to move to a different university or course, or if they decide to withdraw or defer their studies, contact can still be maintained. SNSs will allow for more holistic studies of the university experience.

The use of Facebook to track the experiences of first year students has great potential for future research, especially for longitudinal studies that follow a large number of students for an entire degree. The size of the data-set would pose problems for a small-sample qualitative approach. The use of software, such as Leximancer, is worth investigating as it could handle a much larger amount of data (Penn-Edwards, 2010).

A limitation is in the changeable nature of social media. Facebook is valuable for collecting qualitative data because the networked users must be mutually connected. Mini-blog and video-blog social media platforms such as Twitter and YouTube are gaining popularity and also contain descriptions of experiences of first year. These applications, unlike Facebook profiles, are publically available. A mixed methods approach might consider these applications for access to a larger data set; however, the ethics of what it means to collect online publically available experiential data is far from clear (Henderson, Johnson, and Auld, 2013; James, N. & Busher, 2007).

This study referred to in this paper (Barnes, 2014), has shown the important role SNSs play in the learning experiences of first year university students. By limiting data collection to those status updates only associated with the university experience, it became evident that a type of learning community exists online. While some researchers have employed SNSs to improve transition experiences (Gray et al., 2013) and others have tried to integrate them into learning (Bosch, 2009), Selwyn (2012) suggests that there is a gap in the study of SNSs which do not try to manipulate and control use. This research, as well as that of Selwyn (2009), Baker (2013) and Jenkins et al. (2012), is part of the expansion of this field – a field that is bound to continue expanding over the coming decades.

The use of Facebook as a data gathering tool is an emerging field in higher educational research. To date, the majority of research has been limited to how students use Facebook, its use for social integration, and its relevance in a twenty-first century curriculum. The findings referred to here (Barnes, 2014), indicate that Facebook status data is a worthwhile source of experiential descriptions of the first year of university; therefore, this study takes the use of SNS data one step further and uses it as evidence for framing a transition curriculum. The findings suggest that not only that social network sites are an integral part of first year students' transition process, but also that online resources have potential for future learner centred higher educational research.

#### References

Adams, T., Banks, M., Davis, D., & Dickson, J. (2010). *The Hobsons retention project: Context and factor analysis report*. Melbourne: Tony Adams and Associates.

- Alexa. (2011). Alexa top 500 global sites. Retrieved 03.02.11, from http://www.alexa.com/topsites Baker, S. (2013). Conceptualising the use of Facebook in ethnographic research: as tool, as data and as context. *Ethnography and Education*, 8(2), 131-145. doi: 10.1080/17457823.2013.792504
- Barnes, N. (2014). Facebook status updates about the first year at university: How student experience informs a learner centred transition curriculum. (Unpublished PhD dissertation), Griffith University, Brisbane, Australia.
- Bosch, T. E. (2009). Using online social networking for teaching and learning: Facebook use at the University of Cape Town. *Communicatio*, 35(2), 185-200. doi: 10.1080/02500160903250648
- Bradley, D. (2008). *Review of Australian higher education: Final report*: Department of Education, Employment and Workplace Relations.
- Cheung, C. M., Chiu, P.-Y., & Lee, M. K. (2011). Online social networks: Why do students use facebook? *Computers in Human Behavior*, 27(4), 1337-1343.
- Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of College Student Development*, 48(3), 259-274.
- Gonzalez, N. (2011). Facebook marketing statistics, demographics, reports and news. Retrieved 03.02.11, from http://www.checkfacebook.com
- Gray, R., Vitak, J., Easton, E. W., & Ellison, N. B. (2013). Examining social adjustment to college in the age of social media: Factors influencing successful transitions and persistence. *Computers & Education*, 67(0), 193-207. doi: http://dx.doi.org/10.1016/j.compedu.2013.02.021
- Harvey, L., Drew, S., & Smith, M. (2006). The first-year experience: a review of literature for the Higher Education Academy. *York: The Higher Education Academy*.
- Henderson, M., Johnson, N. F., & Auld, G. (2013). Silences of ethical practice: Dilemmas for researchers using social media. Educational Research and Evaluation, 19(6), 546-560.
- Hew, K. F. (2011). Students' and teachers' use of Facebook. *Computers in Human Behavior*, 27(2), 662-676. doi: http://dx.doi.org/10.1016/j.chb.2010.11.020
- James, N., & Busher, H. (2013). Researching hybrid learning communities in the digital age through educational ethnography. Ethnography and Education, 8(2), 194-209.
- James, R., Krause, K.-L., & Jennings, C. (2010). *The first year experience in Australian universities:* Findings from 1994 to 2009: University of Melbourne.
- Jenkins, G., Lyons, K., Bridgstock, R. S., & Carr, L. (2012). Like our page: using Facebook to support first year students in their transition to higher education. *International Journal of the First Year in Higher Education*, 3(2), 65-72.
- Kift, S. M., Nelson, K. J., & Clarke, J. A. (2010). Transition pedagogy: a third generation approach to FYE: a case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education*, *I*(1), 1-20.
- Krause, K.-L., Hartley, R., James, R., & McInnis, C. (2005). *The first year experience in Australian universities: Findings from a decade of national studies*: Centre for the Study of Higher Education, University of Melbourne Melbourne.
- Lampe, C., Wohn, D. Y., Vitak, J., Ellison, N. B., & Wash, R. (2011). Student use of Facebook for organizing collaborative classroom activities. *International Journal of Computer-Supported Collaborative Learning*, 6(3), 329-347.
- Lazer, D., Pentland, A., Adamic, L., Aral, S., Barabási, A.-L., Brewer, D., . . . Van Alstyne, M. (2009). Computational Social Science. *Science*, 323(5915), 721-723. doi: 10.1126/science.1167742
- Madge, C., Meek, J., Wellens, J., & Hooley, T. (2009). Facebook, social integration and informal learning at university: 'It is more for socialising and talking to friends about work than for actually doing work'. *Learning, Media and Technology, 34*(2), 141-155. doi: 10.1080/17439880902923606
- McInnis, C. (2001). Researching the first year experience: where to from here? *Higher Education Research and Development*, 20(2), 105-114.
- Nairn, K., Munro, J., & Smith, A. B. (2005). A counter-narrative of a 'failed' interview. *Qualitative Research*, 5(2), 221-244. doi: 10.1177/1468794105050836
- OECD. (2011). Editorial. *Education at a glance*. Retrieved from Skills beyond school website: www.oecd.org/edu/skills-beyond-school/48642586.pdf

- Penn-Edwards, S. (2010). Computer aided phenomenography: The role of Leximancer computer software in phenomenographic investigation. *The Qualitative Report*, 15(2), 252-267.
- Penn-Edwards, S., & Donnison, S. (2011). Engaging with Higher Education Academic Support: a first year student teacher transition model. *European Journal of Education*, 46(4), 566-580.
- Reinharz, S. (1994). Toward an ethnography of 'voice' and 'silence'. In E. J. Trickett, R. J. Watts & D. Birman (Eds.), *Human diversity: perspectives on people in context*: Jossey-Bass.
- Roesch-Marsh, A., Gadda, A., & Smith, D. (2012). 'It'sa tricky business!': The impact of identity work in negotiating research access. *Qualitative Social Work*, 11(3), 249-265.
- Selwyn, N. (2009). Faceworking: exploring students' education-related use of Facebook. *Learning, Media and Technology*, 34(2), 157-174. doi: 10.1080/17439880902923622
- Selwyn, N. (2012). Making sense of young people, education and digital technology: the role of sociological theory. *Oxford Review of Education*, *38*(1), 81-96.
- Stephenson-Abetz, J., & Holman, A. (2012). Home is where the heart is: Facebook and the negotiation of "old" and "new" during the transition to college. *Western Journal of Communication*, 76(2), 175-193.
- Tinto, V. (1990). Principles of effective retention. *Journal of The First-Year Experience & Students in Transition*, 2(1), 35-48.
- Tinto, V. (2006-7). Research and practice of student retention: what next? *Journal of College Student Retention: Research, Theory and Practice*, 8(1), 1-19.
- Wilson, R. E., Gosling, S. D., & Graham, L. T. (2012). A review of Facebook research in the social sciences. *Perspectives on Psychological Science*, 7(3), 203-220.